

Hepatology/Liver Transplant Elective

Brief Description

The elective rotation in hepatology/liver transplantation will provide residents with a breadth of experience in caring for patients with liver dysfunction.

The rotation will equip residents with the tools to evaluate a patient with hepatic dysfunction, understand the overall workup including laboratory studies, review of pathology, and various imaging modalities. Additionally, residents will be able to recognize when to refer for transplant evaluation. These skills should be relevant and valuable to the resident and are applicable to careers spanning from general pediatrics to gastroenterology and transplant hepatology. Residents will develop these skills through various clinical opportunities including hepatology clinic, liver transplant clinic, inpatient rounds with the medical and/or surgical hepatology teams, inpatient consults, hepatology-specific radiology conference, pathology rounds, liver selection meeting, and observing liver transplants and/or biopsies in the OR/Interventional radiology. There are also opportunities for educational sessions with hepatology attendings. Working with the rotation director, the curriculum can be tailored to the resident's specific interests.

Goals and Objectives

Goal 1: Understand the workup of a patient with elevated LFT's.

Objectives:

- List the most common etiologies of elevated LFT's in pediatric patients.
- Identify indications for referral to gastroenterology/hepatology including physical exam findings, laboratory findings, imaging findings, and clinical trajectory
- Describe the approach to diagnostic testing, moving from least invasive to most invasive.
- Compare and contrast the various imaging modalities available for evaluating the liver.

Goal 2: Understand the workup of a patient with cholestasis

Objectives:

- List the most common etiologies of cholestasis in pediatric patients
- Describe the approach for diagnostic testing, moving from least invasive to most invasive
- Identify the indications for referral to gastroenterology/hepatology including physical exam findings, laboratory findings, imaging findings, and clinical trajectory
- Compare and contrast the various imaging modalities available for evaluating the liver.

Goal 3: Understand the management of acute hepatic failure

Objectives:

- Describe the primary clinical manifestations of hepatic dysfunction
- Explain the management of hepatic-related coagulopathy
- Explain the management of hyperammonemia
- Explain the management of hepatorenal syndrome

Goal 4: Understand the appropriate circumstances for referral for transplant evaluation

Objectives:

- List the indications and contraindications for liver transplantation
- Use PELD to assign a score for a given patient and interpret the scoring
- Identify the optimal timing for referral given the patient's etiology, acuity, and trajectory

Goal 5: Understand the approach to patient and organ selection for liver transplant

Objectives:

- Describe the organ allocation process
- Explain the Graft to Recipient Weight Ratio (GRWR) and its utility in graft selection
- Compare the potential donor sources of OLT and how these might affect intraoperative approach as well as the immediate postoperative course

Goal 6: Understand the acute postoperative management of liver transplant patients

Objectives:

- Summarize the major principles surrounding immediate postoperative care of the OLT patient
- Describe the most common acute postoperative complications following OLT, their general time course, and the risk factors for these complications
- Explain the initial management of immunosuppression for postoperative OLT patients

Goal 7: Understand long term management of liver transplant patients

Objectives:

- Explain the approach to immunosuppression in post-OLT patients
- Describe the indications for liver biopsy in post-OLT patients
- List the most common long-term complications following OLT
- Describe the indications and contraindications for re-transplant of OLT patients
- Explain and counsel families regarding the predictors of long term outcome following OLT